Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A ~~structured image data processing~~ method of processing ~~that processes~~ data, the data including (i) structured image data including ~~composed of~~ document-image data and corresponding positioning data therein, and (ii) region data indicating a structure of the document-image data, the processing method comprising the steps of:

a) determining a region ~~to be divided~~ of the document-image data to be divided according to predetermined dividing information;

b) dividing the document-image data into plural portions according to the region of the document-image data to be divided;

c) processing in a memory individually the portions of the document-image data to control an amount of the document-image data; ~~and~~

d) renewing the structured image data by replacing the positioning data and the document-image data before the processing with positioning data and document-image data after the processing; and

e) outputting the renewed structured image data.

2. (Currently Amended) The ~~structured image data processing~~ method of claim 1, wherein the dividing information includes data that affect a difference between the document-image data after a color-reducing process and the document-image data before the color-reducing process so that the difference is smaller than a predetermined value.

3. (Currently Amended) The ~~structured image data processing~~ method of claim 1, wherein the dividing information includes score data added to at least one of the positioning data and the region data.

4. (Currently Amended) The ~~structured image data processing~~ method of claim 1, wherein the dividing information includes (i) score data, (ii) a transmit capacity of a transmitting path for transmitting the structured image data, and (iii) ~~a~~n user's request, which are added to at least one of the positioning data and the region data.

5. (Currently Amended) A ~~structured image data processing~~ method of processing ~~that processes~~ data, the data including (i) structured image data including ~~composed of~~ document-image data and corresponding positioning data therein, (ii) region data indicating a structure of the document-image data, and (iii) replaced media dividing information added to the region data, the processing method comprising the steps of:

a) determining in a memory a region ~~to be divided~~ of the document-image data to be divided according to the replaced media dividing information ~~region to be divided~~;

b) dividing the document-image data into plural portions according to the replaced media dividing information;

c) replacing the document-image data divided according to the replaced media dividing information that is added to the region data corresponding to the divided document image; ~~and~~

d) renewing the structured image data by replacing the positioning data, the document-image data, and the replaced media dividing information; and

e) outputting the renewed structured image data..

6. (Currently Amended) The ~~structured image data processing~~ method of claim 5, wherein the replaced media dividing information is formed by text data added to a region.

7. (Currently Amended) A ~~structured image data processing~~ method of processing ~~that processes~~ data including first input data that includes~~composed of~~ (i) first structured image data including ~~containing~~ first document-image data and corresponding positioning data, and (ii) first region data indicating a structure of the first document-image data by regions~~,~~; and second input data that includes~~composed of~~ (i) second structured image data including ~~containing~~ second document-image data and corresponding positioning data, and (ii) second

region data indicating a structure of the second document-image data by regions, the processing method comprising the steps of:

a) determining in a memory a region ~~to be divided~~ of the first input data to be divided, as a region to be renewed, by referring to the second input data;

b) dividing the first document-image data into plural portions according to the region of the first input data to be divided;

c) renewing the ~~divided~~ first structured image data of the first input data according to the divided first document-image data and further positioning data corresponding to the divided first document-image data; ~~and~~

d) combining the renewed first structured image data with the second structured image data, as combined structured image data; and

e) outputting the combined structured image data.

8. (Currently Amended) A ~~structured image data processing~~ method of processing ~~that processes~~ data, the data including first input data that includes~~composed of~~ (i) first structured image data including ~~containing~~ first document-image data and first positioning data, (ii) first region data indicating a structure of the first document-image data by regions~~,~~; and (iii) first score data added to at least one of the first positioning data and the first region data~~,~~; and second input data that includes~~composed of~~ (i) second structured image data including ~~containing~~ second document-image data and second positioning data, (ii) second region data indicating a structure of the second document-image data by regions, and (iii) second score data added to at least one of the second positioning data and the second region data, the processing method comprising the steps of:

a) determining in a memory a region ~~to be divided~~ of the first input data to be divided, as a region to be renewed, by referring to the second input data;

b) dividing the first document-image data into plural portions according to the region of the first input data to be divided;

c) renewing the ~~divided~~ structured image data of the first input data according to the divided first document-image data and further positioning data corresponding to the divided first document-image data; ~~and~~

d) combining the renewed first structured image data with the second structured image data, as combined structured image data, using the first and ~~the~~ second score data; and

e) outputting the combined structured image data.

9. (Currently Amended) An apparatus for ~~a structured image data~~ processing ~~that processes~~ data including (i) structured image data including ~~composed of~~ document-image data and corresponding positioning data therein, and (ii) region data indicating an inner structure of the document-image data, the apparatus comprising:

~~a)~~a divided region determining unit to determine ~~means for determining~~ a region ~~to be divided~~ of the document-image data to be divided according to predetermined dividing information;

~~b)~~an image-dividing ~~means for dividing~~unit to divide the document-image data into plural portions according to the region of the document-image data to be divided;

~~c)~~an image processing ~~means for processing~~unit to process individually the divided portions of the document-image data to control an amount of the document-image data; ~~and~~

~~d)~~a structured image renewal ~~means for renewing~~ unit to renew the structured image data by replacing the positioning data and the document-image data before processing with positioning data and document-image data after processing; and

an outputting unit to output the renewed structured image data.

10. (Currently Amended) The apparatus ~~for the structured image data processing~~ of claim 9, wherein the dividing information includes data that affect a difference between the document-image data after a color-reducing process and the document-image data before the color-reducing process so that the difference is smaller than a predetermined value.

11. (Currently Amended) The apparatus ~~for the structured image data processing~~ of claim 9, wherein dividing information includes score data added to at least one of the positioning data and region data.

12. (Currently Amended) The apparatus ~~for the structured image data processing~~ of claim 9, wherein the dividing information includes (i) score data, (ii) a transmit capacity of a transmitting path for transmitting the structured image data, and (iii) ~~an~~ user's request, which are added to at least one of the positioning data and the region data.

13. (Currently Amended) An ~~The~~ apparatus for ~~the structured image data~~ processing ~~that processes~~ data including (i) structured image data including ~~composed of~~ document-image data and corresponding positioning data therein, (ii) region data indicating a structure of the document-image data, and (iii) replaced media dividing information added to the region data, the apparatus comprising:

~~a)~~a divided region determining unit to determine ~~means for determining~~ a region ~~to be divided~~ of the document-image data to be divided according to the replaced media dividing information;

~~b)~~an image-dividing ~~means for dividing~~unit to divide the document-image data into plural portions according to the region of the document-image data to be divided;

~~c)~~a replacing unit to replace ~~means for replacing~~ the divided document-image data with the replaced media dividing information that is added to the region data corresponding to the divided document image; ~~and~~

~~d)~~a structured image renewal ~~means for renewing~~ unit to renew the structured image data by replacing the positioning data, the document-image data, and the replaced media dividing information; and

an outputting unit to output the renewed structured image data.

14. (Currently Amended) The apparatus ~~for the structured image data processing~~ of claim 13, wherein the replaced media dividing information is formed by text data added to a region.

15. (Currently Amended) An apparatus for ~~a structured image data~~ processing ~~that processes~~ data including first input data that includes~~composed of~~ (i) first structured image data including~~containing~~ first document-image data and corresponding positioning data, and (ii) first region data indicating a structure of the first document-image data by regions; and second input data that includes~~composed of~~ (i) second structured image data ~~containing~~including second document-image data and corresponding positioning data, and (ii) second region data indicating a structure of the second document-image data by regions, the apparatus comprising:

~~a)~~a divided region determining unit to determine ~~means for determining~~ a region ~~to be divided~~ of the first input data to be divided, as a region to be renewed, by referring to the second input data;

~~b)~~an image-dividing ~~means for dividing~~unit to divide the first document-image data into plural portions according to the region of the first input data to be divided;

~~c)~~a structured image data renewal unit to renew ~~means for renewing~~ the ~~divided~~ first structured image data of the first input data according to the divided first document-image data and further positioning data corresponding to the divided first document-image data; ~~and~~

~~d)~~ a structured image data composition unit to combine ~~means for combining~~ the renewed first structured image data with the second structured image data, as combined structured image data; and

an outputting unit to output the combined structured image data.

16. (Currently Amended) An apparatus for ~~a structured image data~~ processing ~~that processes~~ data including first input data that includes~~composed of~~ (i) first structured image data ~~containing~~including first document-image data and first positioning data, (ii) first region data indicating a structure of the first document-image data by regions, and (iii) first score data added to at least one of the first positioning data and the first region data~~,~~, and second input data ~~composed of~~that includes (i) second structured image data ~~containing~~including second document-image data and second positioning data, (ii) second region data indicating a structure of the second document-image data by regions, and (iii) second score data added to

at least one of the second positioning data and the second region data, the apparatus comprising:

~~a)~~ a score-attached divided region determining ~~means for determining~~ unit to determine a score-attached region of the first input data to be divided, ~~of the first input data~~ as a region to be renewed, by referring to the second input data;

~~b)~~ an image-dividing unit to divide ~~means for dividing~~ the first document-image data into plural portions according to the score-attached region of the first input data to be divided;

~~c)~~ a structured image data renewal unit to renew ~~means for renewing~~ the ~~divided~~first structured image data of the first input data according to the divided first document-image data and further positioning data corresponding to the divided first document-image data; ~~and~~

~~d)~~ a score-attached structured image data composition unit to combine ~~means for combining~~ the renewed first structured image data with the second structured image data, as combined structure image data, using the first and ~~the~~ second score data; and

an outputting unit to output the combined structure image data.

17. (Currently Amended) A computer program product for ~~a structured image data~~ processing ~~that processes~~ data, the data including (i) structured image data including ~~composed of~~ document-image data and corresponding positioning data therein, and (ii) region data indicating an inner structure of the document-image data, the program product comprising:

~~a)~~ ~~a~~ program code for determining a region ~~to be divided~~ of the document-image data to be divided according to predetermined dividing information;

~~b)~~ ~~a~~ program code for dividing the document-image data into plural portions according to the region of the document-image data to be divided;

~~c)~~ ~~a~~ program code for processing individually the portions of the document-image data to control an amount of the document-image data; ~~and~~

~~d) a~~ program code for renewing the structured image data by replacing the positioning data and the document-image data before processing with positioning data and document-image data after processing; and

program code for outputting the renewed structured image data.

18. (Currently Amended) The computer program product ~~for the structured image data processing~~ of claim 17, wherein the dividing information includes data that affect a difference between the document-image data after a color-reducing process and the document-image data before the color-reducing process so that the difference is smaller than a predetermined value.

19. (Currently Amended) The computer program product ~~for the structured image data processing~~ of claim 17, wherein the dividing information includes score data added to at least one of the positioning data and the region data.

20. (Currently Amended) The computer program product ~~for the structured image data processing~~ of claim 17, wherein the dividing information includes (i) score data, (ii) a transmit capacity of a transmitting path for transmitting the structured image data, and (iii) ~~an~~ user's request, which are added to at least one of the positioning data and the region data.

21. (Currently Amended) A computer program product for ~~a structured image data~~ processing ~~that processes~~ data, the data including (i) structured image data including ~~composed of~~ document-image data and corresponding positioning data therein, and (ii) region data indicating an inner structure of the document-image data, and (iii) replaced media dividing information added to the region data, the program product comprising:

~~a) a~~ program code for determining a region of the document-image data to be divided according to the replaced media dividing information;

~~b) a~~ program code for dividing the document-image data into plural portions according to the region of the document-image data to be divided;

~~c) a~~ program code for replacing the divided document-image data with the replaced media dividing information added to the region data corresponding to ~~the~~ a divided document image;

~~d) a~~ program code for renewing the structured image data by replacing the positioning data, the document-image data, and the replaced media dividing information; and

program code to output the renewed structure image data.

22. (Currently Amended) The computer program product ~~for the structured image data processing~~ of claim 21, wherein the replaced media dividing information is formed by text data added to a region.

23. (Currently Amended) A computer program product for ~~a structured image data~~ processing ~~that processes~~ data including first input data that includes~~composed of~~ (i) first structured image data including~~containing~~ first document-image data and corresponding positioning data, and (ii) first region data indicating a structure of the first document-image data by regions; and second input data that includes~~composed of~~ (i) second structured image data ~~containing~~including second document-image data and corresponding positioning data, and (ii) second region data indicating a structure of the second document-image data by regions, the program product comprising:

~~a) a~~ program code for determining a region ~~to be divided~~ of the first input data to be divided, as a region to be renewed, by referring to the second input data;

~~b) a~~ program code for dividing the first document-image data into plural portions according to the region of the first input data to be divided;

~~c) a~~ program code for renewing the ~~divided~~ first structured image data of the first input data according to the divided first document-image data and further positioning data corresponding to the divided first document-image data; ~~and~~

~~d) a~~ program code for combining the renewed first structured image data with the second structured image data, as combined structure image data; and

program code for outputting the combined structure image data.

24. (Currently Amended) A computer program product for ~~a structured image data~~ processing ~~that processes~~ data including first input data that includes~~composed of~~ (i) first structured image data ~~containing~~including first document-image data and first positioning data,

(ii) first region data indicating a data structure of the first document-image data by regions, and (iii) first score data added to at least one of the first positioning data and the first region data; and second input data ~~composed of~~that includes (i) second structured image data ~~containing~~including second document-image data and second positioning data, (ii) second region data indicating a data structure of the second document-image data by regions, and (iii) second score data added to at least one of the second positioning data and the second region data, the program product comprising:

~~a) a~~ program code for determining a region ~~to be divided~~ of the first input data to be divided, as a region to be renewed, by referring to the second input data;

~~b) a~~ program code for dividing the first document-image data into plural portions according to the region of the first input data to be divided;

~~c) a~~ program code for renewing the ~~divided~~ structured image data of the first input data according to the divided first document-image data and further positioning data corresponding to the divided first document-image data; ~~and~~

~~d) a~~ program code for combining the renewed first structured image data with the second structured image data, as combined structured image data, using the first and ~~the~~ second score data; and

program code for outputting the combined structured image data.

25. (New) A method for processing a bit map of a document, the method comprising:

producing in a memory tree-structured data corresponding to the document according to the bit map of the document;

dividing the bit map of the document into plural regions based on the tree-structured data;

replacing a portion of the tree-structured data to replace one or more of the plural regions of the bit map of the document; and

outputting the bit map having the replaced one or more regions.